



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,395	12/01/2000	Paul Mills	11033-063001/ A9942US-DJL	3395

26161 7590 07/01/2003

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

PARADISO, JOHN ROGER

ART UNIT	PAPER NUMBER
----------	--------------

3721

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,395

Applicant(s)

MILLS, PAUL

Examiner

John R. Paradiso

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3721

DETAILED ACTION

Response to Amendments

1. In view of the amendments filed 4/7/2003, the objections to the Specification are hereby withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by KOMIYA ET AL (US 6155025).

KOMIYA ET AL discloses a packaging system in which articles (12) are packaged into boxes (30) and printers print indicia (40) on the sides of the boxes to indicate the type and quantity of the articles packaged within in a first section of the system. The boxes are conveyed to a second section where they are then grouped (310) and then conveyed to a third section where the groups are packaged into pallet loads (320). A controller (66) sends signals to each of the elements of the system. (See KOMIYA ET AL columns 4-6 and 9-12 and figures 1, 2, and 19.)

Art Unit: 3721

Note that KOMIYA ET AL does not specifically refer to the data bus that transmits signals and translations of commands from the controller to the peripheral units, however, these limitations are inherent in the invention of KOMIYA ET AL: The connecting of ~~the~~ elements of a machine with a controller, such as connecting a printer or floppy drive to a computers CPU or connecting remote sensors and machine control circuits to a PLC, is inherent in structure and is necessary when any components are connected via a data bus to a controller. The same principle applies to a means for translating data bus commands: if this were not so, the above examples of a computer would not be able to communicate with or recognize the printer ^{or} ~~of~~ floppy drive and the example of a machine with remote sensors and control circuits would not be able to communicate or receive instructions from the PLC.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over KOMIYA ET AL (US 6155025).

Art Unit: 3721

KOMIYA ET AL discloses a packaging system in which articles (12) are packaged into boxes (30) and printers print indicia (40) on the sides of the boxes to indicate the type and quantity of the articles packaged within in a first section of the system. The boxes are conveyed to a second section where they are then grouped (310) and then conveyed to a third section where the groups are packaged into pallet loads (320). A controller (66) sends signals to each of the elements of the system via a data bus.

KOMIYA ET AL does not specifically disclose marking the weight or size of the articles packed within a box, labels for the pallet, a virtual data bus, or the specifics of the control means' signals.

However, Applicant is given Official Notice that the marking of weight and size of articles on the packaging of packed articles is notoriously well known in the art (for instance, the weight of packaged foods, the dimensions of packaged furniture, etc.) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to label the boxes of KOMIYA ET AL in order to provide the consumer with the most information possible about the packaged article, enabling the consumer to understand the contents without the need of unpacking them.

Regarding claim 3, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use thermal transfer printers or laser printers or label printers in place of the inkjet printers in the invention of KOMIYA ET AL since the examiner takes Official Notice of the equivalence of each of the aforementioned types of printers for their use in printing indicia in the packaging art and the selection of any of these known equivalents would be within the level of ordinary skill in the art.

Art Unit: 3721

Regarding claim 10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the recited data transfer protocols since Applicant has not disclosed that the use of any of the particular data transfer protocols solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any data transfer protocol that allows most efficient and effective communication between the controller and the elements of the system.

Regarding claim 11, Applicant is given Official Notice that the use of virtual transmissions (radio, infrared, etc.) to transmit data is well known in the art (and in everyday life, for instance, TV remote controls, etc.) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a virtual data bus to control the elements of KOMIYA ET AL in order to reduce the need for physical cabling and increase the adaptability of the physical system.

Response to Arguments

6. Applicant's arguments filed 4/7/2003 have been fully considered but they are not persuasive.

7. Applicant states on page 4 of his Response that "The passages of Komiya ... referenced in the office action merely describe how a controller controls various mechanisms and patterns and how computer 66 controls various process controllers. .. Komiya nowhere discloses or suggests a 'respective connecting means' for each of a first, second and third marking means and for a means to collect where each respective connecting means includes a 'means to translate data bus commands appropriate to that component into a command protocol which is read by the connected component which responds by performing a productive function, whereby the control means is able to control each of the connected components independent of command protocols is recognized by the connected components.'"

However, as explained above, these limitations are inherent in the invention of KOMIYA ET AL: The connecting of a elements of a machine with a controller, such as connecting a printer or floppy drive to a computers CPU or connecting remote sensors and machine control circuits to a PLC, is inherent in structure and is necessary when any components are connected via a data bus to a controller. The same principle applies to a means for translating data bus commands: if this were not so, the above examples of a computer would not be able to communicate with or recognize the printer of floppy drive and the example of a machine with remote sensors and control circuits would not be able to communicate or receive instructions from the PLC.

Art Unit: 3721

8. Applicant states on page 4 of his Response that “Komiya nowhere addresses the problem solved by the invention of claim 1 and nowhere describes a solution to the problem, let alone the particular solution claimed in claim 1. Komiya does not teach being able to communicate with and control a multiplicity of manufacturers’ equipment by translating commands sent via a common command protocol to commands specific for the various manufacturers’ equipment at respective connecting means.

However, as explained in paragraph 7 above, this function is inherent in KOMIYA ET AL, since the communication with machine parts connected via a data bus to a controller inherently requires commands to be translated in order to be understood. This is also why manufacturers of various types of products that communicate in this way adhere to one or another recognized and established communication protocol standards, so that they can communicate effectively in the system in which they’re connected.

Art Unit: 3721

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Paradiso. The examiner can normally be reached Monday-Friday, 9:30 p.m. – 6:00 p.m. (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada, can be reached at the number listed below.

Any inquiry of a general nature or relating to the status of this application should be directed to the 3700 Technology Center receptionist.



Examiner John Paradiso: (703) 308-2825

June 25, 2003

Additional Phone Numbers

Supervisor Rinaldi Rada: (703) 308-2187
Receptionist: (703) 308-1148
Customer Service: (703) 306-5648

Fax (Direct to Examiner): (703) 746-3253
Fax (TC 3700 Official): (703) 872-9302
Fax (TC 3700 After Final): (703) 872-9303